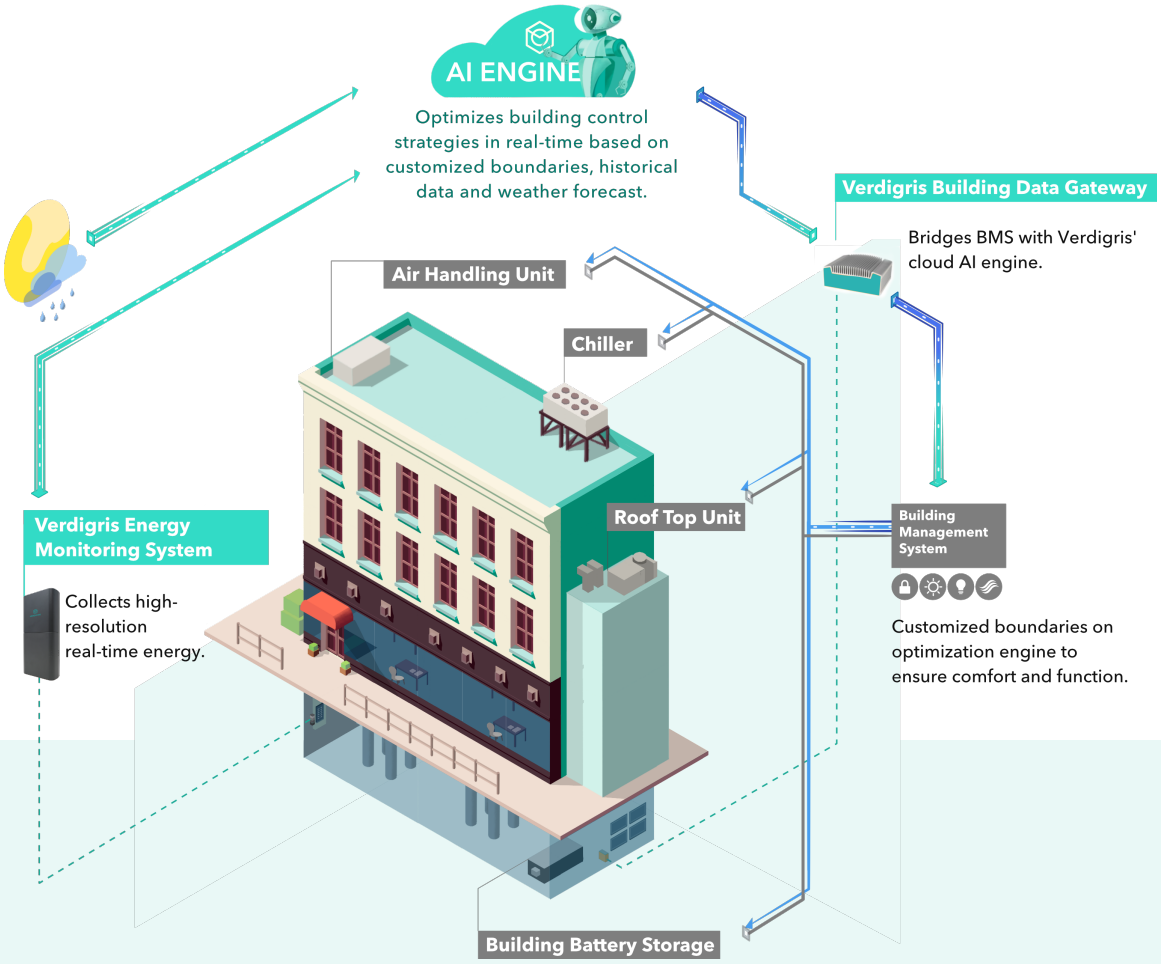
VERDIGRIS

Simplify Your Energy Savings

with Adaptive Automation



Save money effortlessly with Verdigris Adaptive Automation

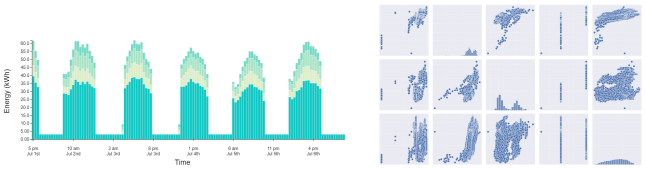
Your building is complex, and you have too much to do to sit by the computer tweaking settings all day. To reduce energy consumption and save money, you need to be able to adapt to changing operating conditions and new equipment loads in real time.

Verdigris Adaptive Automation uses AI to learn your building's patterns and optimize HVAC system performance, continuously adjusting building controls to reduce energy consumption and carbon emissions. No additional effort from onsite staff required.

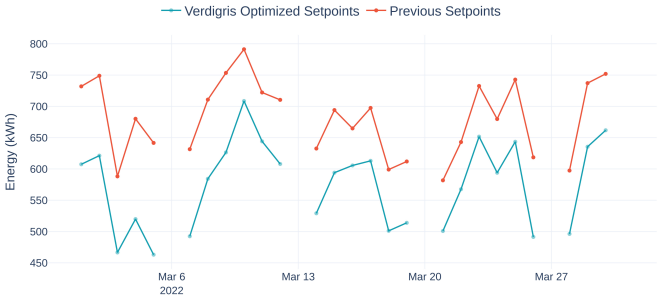
See how customers are saving $0.10 per square foot or more with Adaptive Automation.

AI-Powered for 24/7 Optimization

Our AI learns your building's patterns by combining real-time, high-frequency meter data with local weather, utility rate schedules, and setpoints in your building management system (BMS). Then we build accurate, predictive models of how your building will respond to different setpoints, and find the best setpoint for any minute of the day.



Verdigris Energy Data + BMS & 3rd Party Data



Validated Savings, Continuous Improvement

With advanced Verdigris IoT sensors measuring energy usage directly, your savings are validated, trustworthy, and auditable. As additional data is collected, Adaptive Automation will continue to improve on the recommended setpoints.

Comfort & Safety are Priority #1

We understand that optimization means nothing if the comfort and safety of your building occupants is compromised. To ensure that the adjustments Adaptive Automation makes do not compromise occupant comfort, strict rules are set up with a 5-minute control loop checking to ensure temperatures stay within the agreed-upon desired range.

Proven Results

Here are a few examples of the results customers have achieved with Verdigris Adaptive Automation.

Building	Low-rise Class A Commercial Office Miami, FL	5-Story Class A Commercial Office San Rafael, CA	5-story Class A Commercial Office Orlando, FL	17-Story Class B Commercial Office Honolulu, HI	Converted Warehouse Office & Event Space Los Angeles, CA
Square footage	164,500	132,000	117,300	185,600	60,000
Type of optimization	Chiller optimization	Chiller optimization	Chiller optimization	Cooling tower optimization	RTU optimization
Building management system	Trane Tracer	JCI Niagara	Alerton	Alerton	JCI Metasys
Annualized savings	**36%** 139,000 kWh | $15,795 on HVAC equipment	**29%** 66,500 kWh | $13,230 on HVAC equipment	**55%** 147,400 kWh | $12,549 on HVAC equipment	**20%** 88,100 kWh | $14,149 on HVAC equipment	**17%** 43,000 kWh | $8,477 on HVAC equipment
Annualized carbon emissions reduction	98.4 metric tons	47.1 metric tons	104 metric tons	62.4 metric tons	30.5 metric tons
Optimization: Relax temperatures based on demand	4 to 6° F Chiller Supply Water Temperature	3 to 5° F Chiller Supply Water Temperature	2 to 4° F Chiller Supply Water Temperature	-5 to 7° F Cooling Tower Supply Temperature	1.5 to 8° F Discharge Air Temperature